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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,339	09/26/2005	Marco Cantu	07040.0207	2942

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FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP
901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER	
PHAM, LAM P	

ART UNIT	PAPER NUMBER
2612	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/517,339	CANTU, MARCO	
	Examiner	Art Unit	
	Lam P. Pham	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 December 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *10-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hakanen** et al. (US 2002/0030592).

Re claim 10, Hakanen disclose a system for notifying detected tire operating conditions, comprising:

a device (processor 14 of tire monitor 2) for receiving tire operating parameters (pressure, temperature) detected by at least one sensor (20-26) associated with at least one tire of a vehicle; and

a device (processor 14, memory 18, Bluetooth link 16) for notifying one or more persons outside vehicle via communicator as well as inside the vehicle (known in the art) of an indication of operating conditions (alarm of over-inflation or under inflation) of the at least one tire, determined on a basis of the received tire operating parameters;

wherein the one or more persons inside the vehicle are notified of the indication of the operating conditions of the at least one tire through the radio receiver (receiver and antenna of radio, 84) as seen in Figures 1-6; [0023] to [0072].

However, Hakanen fail to disclose the notifying device comprises a radio data system transmission module for generating a signal receivable by a radio receiver

compatible with the Radio Data System (RDS) standard, and for transmitting the indication of the operating conditions of the at least one tire, exploiting the RDS protocol.

Since Hakanen discloses the receiver (82) receives the tire' s data signal and modifies the signal so that it could be forwarded as a RDS signal to a radio antenna of radio (84), it would have been obvious to one of ordinary skilled in the art to realize that the combined function of the receiver (82) and processor (14) and memory (18) of the tire system (2) would provide the notifying device of the invention, and since Hakanen disclose the alternative communication protocols including Bluetooth, RDS and other RF communication as seen in Figures 4A-4C; [0064] and [0097], it would have been obvious to one skilled artisan to replace the Bluetooth link of system (2) with a RDS link (using a device similar to receiver 82) for sending alarm notification and indicating tire operating conditions via the RDS radio of the vehicle.

B.L. Re claim 11, Hakanen ~~would~~ further discloses the notifying device comprises a microcontroller (processor 14) for determining a message to be notified on the basis of the received tire operating parameters, wherein the microcontroller is fed by the receiving device, and wherein the radio data system transmission module comprises:

a device (receiver 82) for formatting the message to be notified in accordance with the RDS protocol, and

a radio transmitter (receiver 82) for generating the signal, carrying the formatted

B.L. message, receivable by the radio receiver as seen in claim 10 ~~explanation.~~ rejection

Re claim 12, Hakanen fails to disclose specifically a device for coupling the radio transmitter to the radio receiver.

However, Hakanen discloses the receiver (82) receives the tire' s data signal and modifies the signal so that it could be forwarded as a RDS signal to a radio antenna of radio (84) as seen in Figure 4C; [0064] and [0097].

It would have been obvious to one of ordinary skilled in the art to realize that the receiver (82) includes a device equivalent to a coupling device for coupling the receiver to the radio receiver of the radio.

Re claim 13, Hakanen fails to specifically disclose the coupling device comprises: an antenna coupler, and an antenna cable connectable to an antenna input of the radio receiver.

It has been known to have two coupling connections including wired and wireless connections. It would have been obvious to one of ordinary skilled in the art to realize that a wired coupling would include an antenna coupler and an antenna cable or wire connecting to an antenna input to the radio receiver as an obvious design choice.

Re claim 14, Hakanen discloses the receiving device and the sensors are connected directly via a wire connection as seen in Figure 1 and fail to disclose the receiving device is adapted to receive a radio signal transmitted by the at least one sensor.

However, it has been known in the art of communication that a wireless connection is an alternative to a wired connection; thus, it would have been obvious to

one of ordinary skilled in the art to provide a wireless connection for transmitting a radio signal from the sensors to the receiving device as an alternative choice.

Re claim 15, Hakanen ~~would~~ discloses further comprising an audio signal generator adapted to directly drive a loudspeaker system of the radio receiver as part of the entertainment system inside vehicle for acoustically notifying the indication of the operating conditions of the at least one tire as alternative to visual indication as known in the art of alarm indication.

Re claims 16-17, Hakanen discloses the at least one sensor includes one pressure, one temperature sensors (20-26) associated with the at least one tire for measuring inflation pressure of the at least one tire as seen in [0041].

Re claim 18, Hakanen discloses a method for notifying detected tire operating conditions, comprising:

receiving tire operating parameters from at least one sensor associated with at least one tire of a vehicle; and

on a basis of the received tire operating parameters, notifying an indication of the operating conditions of the at least one tire to one or more persons inside the vehicle;

wherein the notifying comprises transmitting the indication of the operating conditions of the at least one tire in a form compliant with the Radio Data System (RDS) protocol, and

wherein the indication of the operating conditions of the at least one tire is receivable by a radio receiver compatible with the RDS standard as seen in claim 10 for explanation.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lam P. Pham whose telephone number is 571-272-2977. The examiner can normally be reached on 10AM-7PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lam P Pham
Examiner
Art Unit 2612

May 18, 2007

BENJAMIN C. LEE
PRIMARY EXAMINER